

# REUSE

**Ready to Deploy Solutions  
for Water Reuse**

# Ready to Deploy UF+RO systems for water reuse

In a context of increasing water stress and drought, **water reuse** in industry is becoming essential to preserve the resource.

To meet the growing needs of industry, Veolia has developed a range of **pre-engineered, digitally enabled plug & play systems**, specifically designed for recycling of secondary treated quality effluent.

Designed by our specialists, the system combines 2 stages of treatment: **Ultrafiltration (UF)** followed by **Reverse Osmosis (RO)** and uses proven proprietary Veolia technologies, especially designed for effluent recycling applications.



UF container

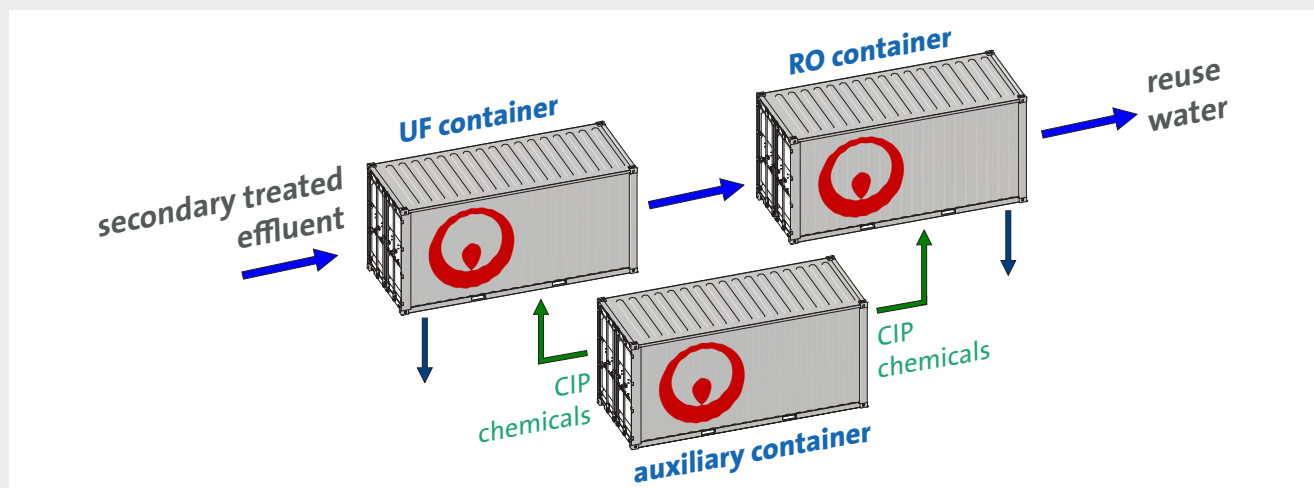


RO container

## Principle diagram

Our systems are delivered in **3 digitally enabled containers** containing our proprietary technologies:

- an UF container, with **ZeeWeed\*** membranes, highly efficient with low energy consumption
- a RO container, with **CaptuRO\***, a technology with a high recovery rate
- a auxiliary container (for the safe storage, dosing and monitoring of Cleaning In Place solutions).



## Associated services

Depending on your requirements, we offer tailor made Service contracts such as:

- **Technical assistance:** Remote monitoring, analysis and regular service visits by our Field Service Reps
- Full **chemical cleaning program** for optimum scale and fouling control
- **Membrane Service Agreements** for guaranteed membrane replacement costs
- **Outsourcing operation & maintenance**
- **Reuse water** - as a service (rate per m<sup>3</sup>)



# Key Features

Our containers are available in **3 sizes**, depending on the water flow rate produced. They contain all the equipment necessary for operation, including remote monitoring, dedicated CIP systems, PLC, etc.

Unit		Small	Medium	Large
Flow Rate produced water (m <sup>3</sup> /h)		5 - 10	15 - 20	25 - 30
UF	UF container size (ft)	20'	20'	40'
	Feed range (m <sup>3</sup> /h)	10 -15	20 -30	30 -45
RO	RO container size (ft)	20'	20'	40'
	Feed range (m <sup>3</sup> /h)	10 -15	20 -30	30 -45



## Performances



Typical system removal values of contaminants:

Parameter	Rejection
Suspended solids	100%
Total Organic Carbon	85 - 95%
Total Dissolved Solids	>98%
Total Hardness	>98%
N-NH4	>97%
Nitrate	>97%
Phosphate	>99%
Bacteria / Virus	6 – 10 log removal
Total Alkalinity	> 98%
Aluminium	>99%
Pesticides	>90%

## Key benefits



- **Designed, assembled and tested in our own plants** for the shortest possible delivery, installation and start-up times
- **Robust design and technologies** complimented with proven expertise in Reuse spanning decades
- Meeting the **highest standards of safety** and accessibility
- A range of comprehensive service packages to **ensure reliable and predictable performance** in challenging Reuse applications including the possibility to provide Reuse water as a service (full service contract)

## Resourcing the world



To contact us, scan the QR code.

**Veolia Water Technologies**

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